ESCAP II: ACCURACY OF THE 2000 CENSUS AND A.C.E. ESTIMATES BASED ON UPDATED ERROR COMPONENTS- TOTAL ERROR MODEL

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EXECUTIVE SUMMARY

The current total error model uses data from various sources to estimate error components which are used to estimate the bias in the A.C.E. estimates. These components and the corresponding data sources for obtaining them are shown in the table below. Ultimately, the total error results are to be used in loss function analysis which compares the accuracy of the original enumeration and the A.C.E. estimates.

The decision whether to adjust for non-redistricting purposes will not use results of the total error model due to uncertainty whether the data sources capture all errors associated with the A.C.E. (for example, duplication error) or whether all components of these errors are correctly incorporated into the total error model.

Components of Error

Error Components	Data Source
P-sample matching error (ESCAP II: Report 7)	2000 Matching Error Study
P-sample data collection error (ESCAP II: Report 16)	2000 Evaluation Followup
P-sample discrepant error (DSSD Census 2000 Procedures and Operations Memorandum Series B-6)	2000 Evaluation Followup
E-sample data collection error (ESCAP II: Reports 3, 24)	2000 Evaluation Followup with adjustments from the PFU/EFU[1] Review
E-sample processing error (ESCAP II: Report 7)	2000 Matching Error Study
Correlation bias (ESCAP II: Report 10)	Revised Demographic Analysis from Sept. 2001
Ratio estimator bias (DSSD Census 2000 Procedures and Operations Memorandum Series B-2*)	2000 A.C.E.
Sampling error (DSSD Census 2000 Procedures and Operations Memorandum Series B-11*)	2000 A.C.E.
Imputation model selection error (ESCAP II: Report 12)	2000 Missing Data Alternatives
Imputation error due to data error[2]	2000 Matching Error Study and 2000 Evaluation Followup with adjustments from the PFU/EFU Review, 2000 A.C.E.

[1] PFU is Person Followup; EFU is Evaluation Followup.

[2] There are two kinds of cases in the production data - imputed and resolved. The evaluation studies directly estimate error components for the production resolved. The analyses of missing data alternatives provides estimates of the error due to choice of imputation methodology. However, the production imputed cases are still affected by date error because any given imputation method is applied to production data -- if the production data contain error, the imputations will be subject to additional error even if the imputation method is perfect. This component measures this error.